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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/590,564

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Dirk Salmon

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EXAMINER

COOLMAN, VAUGHN

ART UNIT

PAPER NUMBER

3618

MAIL DATE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/590,564	Applicant(s) SALMON, DIRK	
	Examiner VAUGHN T. COOLMAN	Art Unit 3618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 December 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-5,8 and 10-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-5,8 and 10-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 December 2010 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the docking rail being “arranged in a marginal region of the base” of claim 1 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities:

The amendment filed 12/23/2010 contains a serious error in the third amended paragraph. First, a singular electric motor is described, and then the description states “the rotational speed of the two electric motors can be controlled independently of each other in a manner known per se”.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1 and 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujiwara et al (U.S. Patent No. 5,746,282) in view of Kozlowski (U.S. Patent No. 6,218,796 B1), Losego (U.S. Patent No. 5,064,012), and Van Horn (U.S. Patent No. 5,773,954).

[claim 1] Fujiwara discloses a cart (10) including:

a base (1);

at least three wheels (2, 3) mounted to the base;

a structure (FIG 48), arranged over the base, capable of receiving cleaning utensils;

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a handle (4); and

an electric motor (6a or 6b) functionally linked to a transmission ("associated gear train" not shown) and acting upon at least one of the wheels, the electric motor being arranged on the underside of the base, wherein the electric motor is arranged approximately at a center of the base, and wherein the electric motor is functionally linked to a corresponding wheel via the transmission.

Fujiwara discloses all of the elements of the claimed invention as described above except for explicitly disclosing an accumulator. Kozlowski teaches an accumulator (battery 54) arranged on the same side of the base as the wheels (44) of the cart. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus shown by Fujiwara with the accumulator of Kozlowski as a power source for the electric motors of Fujiwara (needed for operation).

Fujiwara fails to disclose both a docking rail arranged in the marginal region of the base being connectable to a charging rail for charging the accumulator and the transmission having a differential. Losego teaches a cart including an electric motor (52) acting upon at least one of the wheels (18) of the cart (10), arranged approximately at a center of the cart, wherein the electric motor is functionally linked to a corresponding wheel (32) via a transmission (28, 58) having a differential (56), and including an accumulator (62) equipped with a docking rail (72) arranged in the marginal region of the base (12) and being constructed for charging the accumulator (column 2, lines 66-68). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the cart of Fujiwara with the docking rail of Losego in order to

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provide a convenient and automatic means to charge the battery and to increase the traction of the vehicle.

Fujiwara also fails to disclose a charging rail for charging the accumulator. Van Horn teaches a cart including a docking rail (2050) and a charging rail (2110) for charging an accumulator (2070) on the cart. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the cart of Fujiwara with the charging rail of Van Horn in order to provide a convenient and automatic means to charge the battery as well as secure the cart in one location.

[claim 3] Kozlowski further teaches a control arrangement connected to the electric motor and the accumulator arrangement is provided therein, which includes an operating device (56) proximate to the handle (48).

[claim 4] Fujiwara further shows at least three wheels comprises four wheels arranged under the base, with two wheels being fixed and two wheels being steerable.

[claim 5] Fujiwara further shows the fixed wheels are arranged approximately at a center of the cart in the region of side edges of the base and one movable wheel is arranged centrally in each of a front edge region and a rear edge region of the base when seen in the driving direction.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fujiwara in view of Kozlowski, Losego, and Van Horn, and further in view of Andes (U.S. Patent No. 6,443,252 B1).

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[claim 8] Fujiwara in view of Kozlowski, Losego, and Van Horn discloses all of the elements of the claimed invention as described above except for a joystick proximate the hand grip (4). Andes teaches an electric cart (10) including a hand grip (24) and a joystick (34) proximate the hand grip. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus shown by Fujiwara with the joystick and hand grip configuration as taught by Andes in order to provide the advantage of separate controls for manual and powered movement of the cart.

Claims 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujiwara in view of Kozlowski, Losego, and Van Horn, and further in view of Salmon (DE 100 10 852 A1).

[claim 10] Fujiwara in view of Kozlowski, Losego, and Van Horn discloses all of the elements of the claimed invention as described above except for a stand for an operator. Salmon teaches a cart including a stand for an operator. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus shown by Fujiwara with the operator stand of Salmon in order to provide the advantage of decreased operator fatigue.

[claim 11] Examiner notes that the integration of the stand into the base would have been obvious to one of ordinary skill in the art at the time the invention was made. Integrating the platform would result in a stronger and more durable base for the cart.

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[claim 12] Salmon further teaches the stand including a standing platform having wheels (14) and being attachable to a base of the cart.

Response to Arguments

Applicant's arguments filed 12/23/2010 have been fully considered but they are not persuasive.

In response to Applicant's characterization of the Fujiwara reference teaching away from a single electric motor connected to the drive wheel via a transmission having a differential, Examiner respectfully suggests that a more thorough reading of the entire reference is required. For example, column 7, lines 29-30 state "[w]hile the force detecting device 5 may comprise a single vector sensor, the illustrated embodiment employs two force sensors", implying that a single sensor (for a single electric motor) would be used when only unidirectional force (positive or negative) calculations are needed. Additionally, column 17, lines 16-26 describe a situation in which a single electric motor driving the wheels via a transmission having a differential would be advantageous – "the present invention can be equally applied to a power-assisted cart having driving wheels and steering wheels separate from the driving wheels, similar to Applicant's current incarnation of claim limitations. Examiner notes that the above passages from the Fujiwara disclosure are far from teaching away from a single electric motor having a differential being employed with their invention. The other embodiments shown by Fujiwara, in light of the cited passages, do not reach the level of teaching away.

Conclusion

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Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **VAUGHN T. COOLMAN** whose telephone number is (571)272-6014. The examiner can normally be reached on Monday thru Friday, 10am-8pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. Allen Shriver can be reached on (571) 272-6698. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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